CASES BEARING UPON CERTAIN MOOTED POINTS IN SYPHILOLOGY.[1]

By EDWARD L. KEYES, M.D.,

OF NEW YORK.

PROFESSOR OF CUTANEOUS AND GENITO-URINARY DISEASES IN BELLEVUE HOSPITAL MEDICAL COLLEGE.

THE EXCISION OF SYPHILITIC CHANCRE.

CASE I. In 1884, a medical gentleman from a neighboring State called at my office to show me a small pimple situated upon the middle portion of the integument of the dorsum of the penis. This lesion was an acuminated papule, not capped by a pustule. The epidermis was unbroken. The color was slightly livid, the size about $^3/_{16}$ of an inch at the base. There was no appreciable induration. Indeed, the lesion had no pronounced specific character. It was not painful. There was no inguinal glandular engorgement. The lesion had appeared during the afternoon of the day before I saw it. It was less than twenty-four hours old, and the patient ascribed it to suspicious sexual contact dating back two weeks. The integument of the penis and the rest of the body was normal, the general health good.

A diagnosis was impossible, although the general appearance of the lesion suggested an accidental papule, and would have justified a favorable prognosis as to syphilis. Yet the patient was solicitous that something should be done.

Cocaine as a local anæsthetic was just coming into use, and I proposed to him excision with the aid of this agent. He gladly accepted the test. I washed the unbroken surface with a powerful solution of bichloride of mercury, one in two and a half, dried it, injected 5 ♏ of a 4% solution of cocaine, caught up the little papule, with a full margin of the ample soft integument around, and with scissors curved on the flat excised an abundant fold, including the lesion and considerable healthy tissue around. Two catgut ligatures upon bleeding veins and

[1] Read before the New York Surgical Society, April 14, 1885.

three catgut sutures promptly finished the operation and left the wound absolutely dry. The patient had not experienced a particle of pain. On his return home the doctor visited the suspected person, and found that she had a syphilitic eruption.

The wound healed promptly by first intention. On the sixty-second day, after three or four days of premonitory fever, no medicine having been taken, the patient observed a mild roseola, which promptly disappeared. Fourteen days later he visited me. He had lost eight pounds in weight. In one groin were two indolent indurated glands, and there was one in the other groin. The site of the excised chancre was soft and perfectly well, showing only a faint linear white scar. There was intense rheumatism, worse at night. There were scabs in the scalp, and the hair was falling. A profuse general papular syphilide covered the entire trunk, the face and both the palms. Mucous patches abounded in the mouth. The eruption was brilliant and abundant; the patient pallid.

The disease had not been interfered with by any medical treatment, and was a plain instance of a sharp attack of syphilis which had not seemingly been in any degree modified by the excision of the initial lesion, although executed under unusually favorable circumstances.

This case I consider worthy of record because it fulfills the most exacting conditions for testing the question, still under consideration in the profession, as to whether syphilis is or is not already a constitutional disease when the chancre appears.

I do not care to tabulate statistics of the excisions practiced by various operators. The *résumé* of Dr. Morrow,[1] in December, 1882, covered enough cases to allow generalization, and nothing which I have seen since that date has modified the conclusion he seemed justified in drawing—namely, that the excision of chancre does not attenuate the poison of syphilis or modify the general symptoms.

Berkeley Hill's case,[2] it appears to me, carries more weight than any other reported before or since. A man tore his frænum during intercourse at 4 A.M. At 3:30 P.M. on the same day—less than twelve hours after the exposure—Hill destroyed the entire raw surface with fuming nitric acid. An eschar separated, and the wound healed. A month later the cicatrix indurated and general syphilis followed.

[1] *Journal of Cutaneous and Venereal Diseases.*

[2] *Syphilis and Local Contagious Disorders*, Hill & Cooper, 1881, p. 76.

My own opinion has been strongly opposed to the belief that local excision of chancre would prevent or modify general syphilis. I have offered the treatment to many, but, as I never felt conscientiously at liberty to promise any advantage as a result of the operation, my proposition has been declined. I would not have operated in this case except to test the cocaine, and because the patient, being a physician, earnestly desired it.

My case is quite analogous in its history and result to one reported by Dr. R. W. Taylor,[1] where a papule was excised upon the day on which it appeared, with no advantage to the patient, whose general symptoms came out in two weeks. It is on a par with others where early excision was practiced in vain (Mauriac—forty-eight hours).[2]

I have recently encountered another case in point (unpublished):

CASE II. X, æt. 37 years, came to me in January, 1885, stating that in November, 1883, he noticed a small chancre on the penis. This was excised on the first day, and the wound promptly healed. In six weeks he had a general roseola. He is now in his second year, having had numerous eruptions, and been plentifully treated in various ways, including 45-grain doses of the iodide of potassium three times a day, and a course of eight weeks at the Hot Springs, during which time 10 ℥ of blue ointment were rubbed into him. He came to me for some small gummatous tubercles upon the face, and is still under treatment. In this instance surely the excision did not formally modify the intensity of the disease.

A medical friend, who wishes to be nameless, has recently reported to me a case of excision within twenty-four hours of the appearance of the lesion, in which general symptoms (roseola) appeared upon the thirty-second day. In other words, it has not been my good fortune to meet with any case where excision was practiced with a favorable result.

I think it not difficult to understand how apparent success may follow excision when we remember the multiple sources of possible error in diagnosis; and particularly is this the case

[1] *Venereal Diseases*, 1883, p. 510.
[2] *Ann. de derm. et de syph.*, July, 1881, p. 523.

in Germany, where the best results are alleged (30 to 50%), for there the advocates of excision are all unicists (notably Auspitz and Kaposi), and are doing their best to return all primary venereal sores into that chaos from which Bassereau and the French school have endeavored to deliver them.

The sources of error to which I refer are:

1. Inflammatory induration of lesions not syphilitic.
2. The small ulcerated gumma of the penis.
3. Non-specific sores which resemble the infecting chancre.
4. Cases of delayed syphilis.

I need not cite instances of the first two classes mentioned above. We are all familiar with the local sore of unknown incubation, with a hardness so nearly typical that we can not ignore its peculiar quality, yet where observation without treatment has proved the absence of any true venereal taint.

The localized gumma commences as a tubercle under the skin, has all the essential hardness, and sometimes the inguinal indolent adenopathy. Its physical characters might deceive any one. It may come upon one in seemingly vigorous health, and be the only lesion present. The patient may have forgotten his old syphilis, the last symptoms of which occurred, perhaps, ten years before. I have had more than one such case. If, now, this individual has had suspicious sexual contact a month before the sore appears, his is very apt to be considered a case of re-infection. These localized gummata (pseudo-chancres) have a marked partiality for occupying the site of the original chancre—but this is not an invariable rule.

Of the third class, a sore resembling but not being a specific ulcer in any poisonous sense, I have seen a number of examples. The most striking is the following. I have no theory upon which to explain it, but can affirm that I have never seen a more typical excoriated induration as a starting-point of syphilis than was this simple inflammatory hardening:

CASE III. A young man came to me about two years ago with a tight foreskin and a contracted preputial orifice, from which a moderate amount of pus exuded. In the substance of the prepuce, at about its right lateral centre, was a hard disc with clearly defined margins, insensitive, giving to the fingers about the feel one would expect to get

from a disc of guttapercha set into the foreskin. The patient could retract the foreskin formerly, and assured me that he had seen an ulcer on the inner surface of the hard spot so long as he could expose it to view, which of late had become impossible. The sore had appeared one month after intercourse. There were two or three indurated glands in each groin.

This boy had consorted with only one female. She would not allow herself to be examined. She shared her favors among a set of young men of whom several had been patients of mine for various disorders not syphilitic. These young men continued to consort with this woman, before, during and after the date of the alleged experience in this case. All remained well excepting one, who acquired mild urethritis from intercourse too near the menstrual epoch. After a local treatment of several weeks I was enabled to retract the foreskin and inspect the lesion. It proved to be a simple livid excoriation upon a sharply defined induration. There had been no true ulcer. The whole physical appearance of the lesion was that of infecting chancre. I concluded that it must be due to mediate contagion.

No internal treatment was ever given. I watched the case several months. The excoriation healed, the induration disappeared, and no symptoms of syphilis followed.

This case is unique in my experience. I believe it to have been an unusual form of simple inflammation, traumatic in origin, due primarily to tightness of the foreskin. If it was syphilis, it was delayed syphilis.

I have seen a number of other traumatic lesions which might have been mistaken for the starting-point of syphilis, but nothing so seemingly typical as this case. In any event such cases are not common.

DELAYED SYPHILIS.

CASE IV. A gentleman æt. 37 years called upon me in September, 1883. He stated that he had had an ulcer on the penis in August, 1880, which appeared three months after exposure. This was the first venereal symptom he had ever observed. The sore was treated locally. It healed within two weeks. No symptoms followed.

In April, 1883, more than two years and a half after the alleged chancre, he fell into a sort of stupor, with fever and rheumatic pains, especially of the feet. After three weeks a spotted eruption came out upon his palms which was pronounced to be syphilitic. Then his throat

got sore, ulcers appeared in the mouth, the hair fell out freely, and, having been taking anti-syphilitic treatment already for a few weeks, he became alarmed and went to the Hot Springs. There he was treated actively. In July he had some ocular trouble, which improved at the Hot Springs. At my examination I found two characteristic palmar desquamating spots and some mucous patches in the mouth.

This case, of course, allows of a suspicion of a new infection in March, 1883, but the patient, who was absolutely free in giving his history, disclaimed it.

CASE V. X, æt. 30 years, visited me in November, 1883, stating that five years previously he had a local set of lesions on the penis, for which he received no internal treatment. He remained well one year. Then painful lumps appeared under the scalp, the throat ulcerated, the bones of the nose came away, the middle ear suppurated, rupial eruptions, scaling spots, and papulo-squamous patches came out upon various parts of his body. Then he got heart flutterings, dyspnœa, vertigo and dyspepsia. The patient denied any venereal malady up to the time of the sores first mentioned.

Anything so irregular as these two cases, of course, is a matter of suspicion, but the unexpected element in syphilis is so common, and irregularities from the normal type are so constant, that I think it possible to accept them as instances of irregular or delayed syphilis.

These last-described forms of disease, capable of causing error in the diagnosis of syphilitic chancre, are very uncommon; the first two, inflammatory hardening of chancroid and local cutaneous gumma resembling chancre, are very common. Whether it is possible that observers so renowned as the German advocates of the excision theory could be mistaken in their diagnosis in such a large percentage of cases, I can not affirm. It seems improbable, yet it is more improbable that success should follow an excision practiced upon a chancre several days old, with the inguinal glands already involved, as has been alleged, and that failure should occur in cases like those I have narrated at the beginning of this article.

MEDIATE CONTAGION OF CHANCROID.

The mediate contagion of true syphilis is notoriously not

impossible, several authentic instances of it being recorded. I do not remember to have seen the report of any case of the mediate contagion of chancroid, and therefore bring forward the following:

CASE VI. X, æt. 20 years, visited me in August, 1883, with an ulcer upon the penis behind the corona glandis, having a hard base. There was one hard gland in the groin, slightly sensitive. His history was as follows: After two months of continence he had cohabited with a woman who had formerly been syphilitic, but had remained free from symptoms for five years. This woman was the mistress of a friend. On the morning following intercourse the patient noticed an excoriation, which on the third day swelled up and discharged. It was then burned by a physician, whereupon the base hardened and the ulcer began to grow larger. I saw it on the twentieth day, when it had all the appearance of chancroid with an inflamed base.

Five days after exposure the patient had the woman examined. She was declared sound except as to leucorrhœa. I pronounced the sore a probable chancroid, and urged a further search as to cause. The search developed the following facts: On the night before the day on which my patient had cohabited with the woman she had had intercourse with another person, and had remained partly intoxicated and lying quiet thereafter until my patient had cohabited with her. The man in question was followed up, and found to have a well-marked chancroid under treatment. This sore he possessed at the date of intercourse with the woman.

My patient's ulcer healed after six weeks. No syphilis followed. The woman did not acquire any sore, nor did the man who habitually lived with her.

THE HUTCHINSONIAN TEETH.

The test teeth of inherited syphilis are the two central permanent incisors in the upper jaw. They are known as Hutchinsonian teeth, after the distinguished Englishman who first accurately described them.[1]

The broad, rather shallow groove on the cutting surface is the feature which distinguishes them. These teeth are often convergent or divergent, but may be straight, and they are often narrowed on the cutting edge, but not necessarily so.

[1] *Illustrations of Clinical Surgery*, London, 1876, Fasciculus III, Plate XI.

I have here two casts of the upper set of teeth, showing the characters usually believed to indicate inherited syphilitic disdisease. (Fig. 1 and Fig. 2.) I present with them Hutchinson's original plate and photograph of the woman whose teeth are pictured in Fig. 2, showing the macular syphilide which was upon her when I first saw her. The patient whose teeth are represented in Fig. 1 had inherited syphilis. The patient possessing the teeth represented in Fig. 2 showed no sign of ever having had inherited disease, and came to me with fully marked secondary syphilis, which she had acquired from her husband. I think the case is interesting as illustrating the fact that teeth very closely if not identically resembling the test teeth of Hutchinson may be possessed by a patient who has not inherited the disease. The cases are briefly as follows:

FIG. 1. CASE OF INHERITED SYPHILIS.

CASE VII. (To this case belong the teeth of Fig. 1. One of the outer incisors was crowded out of line by the contraction of the jaw, and appeared behind the alveolar border. It is not represented in the cast, which was taken by the husband of the patient, a plasterer by trade). In 1878 I first saw this patient, fourteen years old, with large gumma in the right axilla, then two years old. Her mother, who brought her, had an old syphilitic ulcer on the leg, at the bottom of which was a necrosed portion of the tibia. The child had also a large node on the left tibia. She had strabismus and bad headaches, with some scabs in the scalp. When five weeks old an eruption came out over the entire body, worse on the feet, and she has suffered from mottled, livid scaling spots and rheumatic pains ever since. Her treatment has been more or less constant since birth. The child was plainly a victim of inherited disease. The mother was frankly syphilitic, and had miscarried once and produced two dead children before the birth of this child. The father was also syphilitic (ulcers and nodes).

This patient had a variety of disorders, among which was sudden blindness for half an hour at a time; but she recovered of everything even of her strabismus, under treatment; married at the age of 17 years, produced a healthy child, then took to drink, developed a well-marked tubercular syphilide on the arms, with ulcers on the scalp; mis carried five times in succession, and finally died.

FIG. II. CASE OF ACQUIRED SYPHILIS.

CASE VIII. (To this case belong the teeth of Fig. 2). Mrs. X, æt. 31 years, visited me in February, 1884, showing flat, mottled patches of a recent papulo-erythematous syphilide, covering the trunk and extremities, with a few spots on the face. She related that her husband had a sore upon his penis, and had given her a similar ulcer upon the vulva some weeks previously. The sore was well at the date of her visit to me. She showed also mucous patches in the mouth, indurated glands, falling of the hair, etc., and the teeth as seen in the cast.

Her father and mother are alive and well, she says. She herself has always been healthy. She has no scars, no syphilitic countenance, no history and no evidence of any inherited disease. She is robust and well formed, has had five healthy children, and laughs at the idea of having suffered from any inherited malady. Actually she has recent syphilis. In March, 1885, one year later, she returned, still under treatment at the hands of her own physician, and presenting well-marked clusters of tuberculo-squamous syphilide in patches upon various parts of the body. The photograph shows the appearance of the first eruption on the chest.

THE ADMINISTRATION OF THE IODIDE OF POTASSIUM IN MILK.

I wish to add a word in favor of milk as a most suitable vehicle in which to administer the iodide of potassium, notably in cases where large quantities of the drug have to be used. several years ago a patient first called my attention to the fact

that he could take his dose of iodide of potassium in milk without minding the taste, which otherwise was very offensive to him.

I adopted the suggestion at once, and found it of great service in many cases. Ten grains or more of the iodide in a gill of milk (cold) makes a very palatable drink, and imparts only a mild metallic taste to the fluid, which most patients find not at all disagreeable. I have used this method in a routine way with the happiest result in several instances in those desperate cases where some portion of the nervous system gives out, food is unpalatable or can not be taken, and the indication is, disregarding all else, to push the iodide rapidly to the point of tolerance. In such a case no time can be lost, and a fixed routine system which shall accomplish all the needs of nourishment as well as medication is a very valuable factor in the treatment. I will cite one illustrative case out of a number in which I have used the method:

CASE IX. In the summer of 1883 a gentleman was referred to me from another city with precocious malignant syphilis (rupial in type) and a feeble stomach. He could not digest the iodides well, as they deranged the stomach and caused disfiguring acne, a 20-grain dose of the iodide of sodium being too much for him.

His symptoms gradually disappeared, he returned home, and for about a year did more or less well and badly until his physician, one of the most thoroughly competent gentlemen in the profession, concluded that the antisyphilitic treatment was keeping his stomach so constantly deranged that he was suffering more from treatment than the disease. He therefore omitted medication for a time, and again sent the patient to New York to see me.

He came to the city and remained in his hotel two days, not calling upon me and feeling rather better, but being much excited at night and sleepless. His only active symptom was one ulcer on the arm. On a given day at noon, while lying quietly on a lounge in his room, he got up to cross the floor. Having accomplished his object upon the other side of the room, he turned to go back, but, when half way across the floor, without warning or pain, he suddenly fell in a heap upon the floor (his age was 36 years), without loss of consciousness, and found himself unable to get up or to speak. I saw him shortly afterwards, and found him totally paralyzed upon the right side and aphasic. He had no heart disease of any kind, and the only premonition of the at-

tack had been a certain recurring numbness of the fingers and toes of the *left* side during each of several days before the attack. I procured a day and a night nurse, and ordered quiet and the cessation of all habitual food, drink and medicine, and instructed the nurses to give him each hour, night and day, 10 grains of the iodide of potassium in a claret-glass of milk.

He took in all, nearly three quarts of milk and 240 grains of the iodide of potassium, in the first twenty-four hours. A laxative was the only other thing allowed. I increased the daily dose 2 ʒ each second day, and after a week employed also inunctions of mercurial ointment, which I pushed rapidly until the gums were mildly touched.

During the second week his daily dose reached 1½ ʒ of the iodide. He took no food whatever except the milk in which his medicine was given, and he took an occasional laxative. His tongue cleared, the acne disappeared from his face, and early in the second week he began to move his arm and leg spontaneously. Electricity and massage were now added, and in one month from the date of the attack he left the city, walking with a cane and dragging his foot slightly, but talking about as naturally as ever and looking exceedingly well. The daily dose was then 10 ʒ, taken in four separate portions, for as he got better I gave up the hourly medication, and allowed him to eat.

The patient is still under observation, doing well, taking 10 ʒ of the iodide a day, which he has continued for several months, and promising nearly, if not quite, a perfect recovery.